

Unit 6 Test Review

Name _____

Period _____

Solve each problem showing every step. Graph the inequalities. The problems with ** are challenge problems. Try them!

A

1) $b + 10 - 3 = 44 \div 2$

1)

A

2) $n - 8 = 24$

2)

A

3) $h - 6 = 32$

3)

A

4) $-25 = j + 5$

4)

A

5) $a - (-11) = -14$

5)

A) 6) $-29 + t = -16$

6)

B) 7) $5\frac{1}{3} + g - 2\frac{1}{6} = -9$

7)

A) 8) $-9 - (-r) = 12$

8)

B) 9) $-5 = 4s + 6\frac{1}{3}$

9)

A) 10) $\frac{4}{5}y = -72$

10)

A) 11) $22 = \frac{r}{36}$

11)

A

12)

$$-15n = 75$$

12)

B

13)

$$2v + 47.8 = -18.3$$

13)

A

14)

$$18 = -\frac{4}{9}m$$

14)

A

15)

$$-3.72y = 5.208$$

15)

A

16)

$$\frac{1}{8}t = 19$$

16)

A 17) $\frac{c}{5} = -20$

17)

B 18) $\frac{1}{2}f = 17\frac{1}{3}$

18)

A 19) $\frac{a}{2} + 3 = 6$

19)

B 20) $\frac{1}{4}b - (-3.5) = 19$

20)

B 21) $-11 + \frac{a}{3} = 5$

21)

C ** 22) $-(g-9) + 3g - 8 = 65$

22)

23)

\boxed{C} ** 23) $\frac{5(x-3)}{3} = \frac{2}{9}$

\boxed{B} 24) $\frac{5}{7}e - \frac{2}{3} = 16$

24)

\boxed{C} ** 25) $-12 + 4(7c - 16) = -132$

25)

\boxed{A} 26) $x + 7 \leq -18$

26)



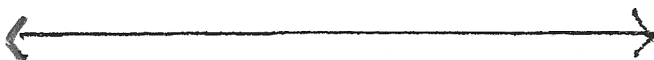
\boxed{A} 27) $30 < 4b - 6$

27)



\boxed{B} 28) $\frac{1}{4}(20 + x) \leq 6$

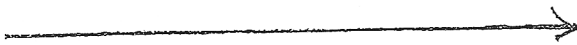
28)



B 29) $-10 > n - 6.13$



A 30) $\frac{2}{5}w + 7 \leq 4$



A 31) $6a < 18$



A 32) $11k - 9 > 22$



Write an algebraic expression for each word phrase:

A 33) 7 more than a number y

A 34) 6 times the sum of 4 and y

A 35) 11 less than a number

29)

30)

31)

32)

33)

34)

35)

36)

36) half the sum of m and 5

A 37) 9 more than the product of 6 and a number

37)

B 38) 6 less than the product of 13 and a number

38)

A 39) 2 less than a number divided by 8

39)

A 40) the quotient of a number and 5

40)

41) At the Boston Aquarium there is a fish tank which has 73 fish in it. There are 3 more than 4 times as many clown fish as goldfish. How many of each type of fish are there?

A

41)

42)

- B** 42) In the North Pole there are 186 male and female penguins which were tagged. 30 less than 5 times the number of males were tagged than females. How many of each were there?

43)

- A** 43) The total weight of Sam and his son, Dan, is 250 pounds. Sam's weight is 10 pounds more than 3 times Dan's weight. How much does Dan weigh?

44)

- A** 44) Gina and Mary were paid \$126.50 for babysitting over the weekend. Gina made \$18 less than 6 times as much as Mary. How much did each girl make? (round your answers to the nearest cent)

45)

A 45) Two consecutive numbers have a sum of 99. What are they?

46)

B 46) Three consecutive numbers have a sum of 375. What are the numbers?

Solve the following multi-step equations.

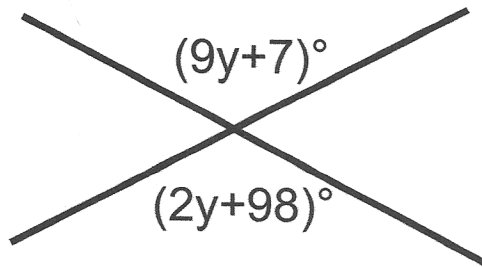
47)

A 47) $3y + 7 = -6y - 56$

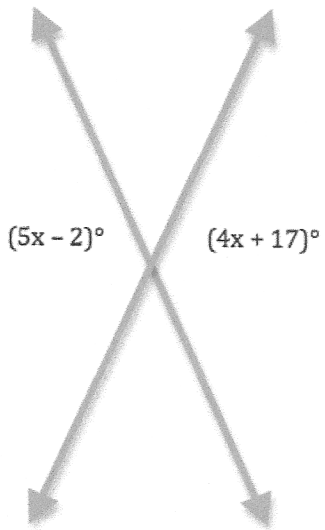
48)

B 48) $.8k + 7 = -0.7k + 1$

49) Find the angle measure in each diagram below.



50)



51)

